- 4 · to obtain secure data exchanges between said interconnected entities ( $U_1$ , 36a-36b, 37a-
- 5 37d).
- 1 5. Method according to claim 4, characterized in that, said first entity being a
- 2 user  $(U_1)$  of said first system (4, 20), it includes a step for authenticating said user  $(U_1)$
- and in that said IP address is used as data for identifying this user  $(U_1)$ .
- 1 6. Method according to clam 5, characterized in that since said
- 2 communications take place in data packet mode, said data for identifying a user (U1) is
- 3 present in encrypted form in conformity with said IPSec protocol, in each of said data
- 4 packets.
- 1 7. Method according to claim 1, characterized in that said first system (4, 20)
- 2 is connected to a wireless transmission segment (RTT), in that the communications
- 3 between this first system constituting a client system (4, 20) and said second system
- 4 constituting a server system (3, 3') take place in conformity with the so-called WAP
- 5 protocol, and in that it includes the installation in said second system (3, 3') of at least one
- 6 piece of software constituting a WAP server (30) and a second piece of software (32)
- 7 forming a unified interface between said WAP server (30) and at least one application
- 8 (36a-36b, 37a-37d) offering its services to said first entity  $(U_1)$ , so that said WAP server
- 9 (30) is integrated into said server system (3, 3') as a web server.
- 1 8. Method according to claim 7, characterized in that it includes the
- 2 installation in said second system (3, 3') of an additional module (35) for two-way
- 3 interface adaptation of structures, which makes it possible to support application
- 4 interfaces (33) used by web servers.
- 1 9. Method according to claim 7, characterized in that it includes the
- 2 installation in said first system (4, 20) of a piece of software constituting a client and in
- 3 that said piece of software is a WAP browser.
- 1 10. Method according to claim 1, characterized in that, said first system being
- a mobile system (25), it includes the assignment to said first system (25) of a temporary

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- 3 \* address, and in that it includes a step for dialog between said first system (25) and an
- 4 element called a "home agent" (23) connected to said internet network (it), which makes
- 5 it possible to correlate, at all times, said permanent address assigned to said first entity
- 6  $(U_3)$  with said temporary address, in conformity with the so-called "mobile IPV6"
- 7 protocol".
- 1 11. System architecture for secure communication between first and second entities interconnected via an internet network, said entities being associated with first and second computer data processing systems within a set of distributed systems connected to said internet network, characterized in that said first system (4, 20) is a
- 5 system operating in the so-called client mode and said second system (3, 3') is a system
- 6 operating in the so-called server mode, in that said first and second entities are pieces of
- 7 software (36a-36b, 37a-37d) hosted in said first (4, 20) and second (3, 3') systems and/or
- 8 a user  $(U_1)$  of said connected systems, in that said entities  $(U_1, 36a-36b, 37a-37d)$  are
- 9 associated with permanent Internet addresses of the so-called IP type, in that said second
- system (3, 3') forming the server comprises at least one piece of software (31) forming a
- server (30, 31) and offering the services of at least one application (36a-36b, 37a-37d) to
- said first entity  $(U_1)$ , and in that said first (4, 20) and second (3, 3') systems include a
- 13 communication protocol stack comprising at least one address layer (44, 390) using said
- 14 permanent IP address and a logical layer (45, 391) for the execution of a step for
- encrypting, in end-to-end mode in conformity with a given security protocol, data
- exchanged between said interconnected entities ( $U_1$ , 36a-36b, 37a-37d).
  - 12. Architecture according to claim 11, characterized in that said address layer (44, 390) conforms to the IPV6 protocol.
  - 1 13. Architecture according to claim 12, characterized in that since said internet
- 2 network (R) conveys data packets in conformity with the IPV4 protocol, said protocol
- 3 stacks of said first (4, 20) and second (3, 3') systems each include a first address layer (44,
- 4 390) using said IP address in the IPV6 protocol, and a second address layer (46, 392) in
- 5 the IPV4 protocol from which IPV6-compatible addresses are derived, in order to obtain
- 6 exchanges in the so-called tunnel mode; said logical layers (45, 391) executing an

- 7 · encryption step (45, 37) in favor of said data packets exchanged between said
- 8 interconnected entities  $(U_1, 36a-36b, 37a-37d)$ .
- 1 14. Architecture according to claim 11, characterized in that said logical layers
- 2 (45, 391) for executing an encryption step conform to the so-called IPSec protocol, used
- 3 with the so-called EPS mechanism for identifying information sources, in the so-called
- 4 tunnel mode, in order to obtain secure data exchanges between said interconnected
- 5 entities  $(U_1, 36a-36b, 37a-37d)$ .
- 1 15. Method according to claim 11, characterized in that said first system
- 2 (4, 20) is connected to a wireless transmission segment (RTT), in that the communications
- 3 between this first system (4, 20) constituting a client system and said second system (3,
- 4 3') constituting a server system take place in conformity with the so-called WAP protocol,
- 5 and in that said second system (3, 3') includes at least a first module constituting a WAP
- 6 server (30) and a second module (32) forming a unified interface between said WAP
- 7 server (30) and at least one application (36a-36b, 37a-37d) offering its services to said
- 8 first entity  $(U_1)$ , so that said WAP server (30) is integrated into said server system (3, 3')
- 9 as a web server.
- 1 16. Architecture according to claim 15, characterized in that said second
- 2 system (3, 3') includes at least one additional module (38*a*-38*b*) for the two-way
- 3 conversion of data packets of structures in conformity with said web or WAP protocols.
- 1 17. Architecture according to claim 15, characterized in that said first system
- 2 is a mobile telephone terminal (20, 4) in the so-called GSM standard, in that it includes a
- 3 WAP type browser constituting a client, and in that it includes a display screen for
- 4 displaying pages in a language of the so-called WML type.
- 1 18. Architecture according to claim 15, characterized in that said first system
- 2 is a mobile telephone terminal in the so-called GPRS standard, in that it includes an
- 3 Internet browser constituting a client, and in that it includes a display screen for
- 4 displaying pages in a language of the so-called WML type.